ITD D6 ISLAND PARK IP HOUSING DEVELOPMENT

ISLAND PARK, ID **DRAWING INDEX**

SHEET TITLE

COVER SHEET

ARCHITECTURAL SITE PLAN

OVERALL FLOOR PLANS

FOUNDATION PLAN

MECHANICAL PLANS

MECHANICAL PLANS

ELECTRICAL SITE PLAN

ONELINE DIAGRAM & TRENCH DETAIL

COVER SHEET

POWER PLAN

SHEET NUMBER

GENERAL SHEETS

SITE PLANS

FLOOR PLANS

STRUCTURAL

ELECTRICAL

PLUMBING AND MECHANICAL

P1.0

E0.0

SE1.0

E1.0

CIVIL

SHEET TITLE:

COVER SHEET

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

DBS STAMP

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

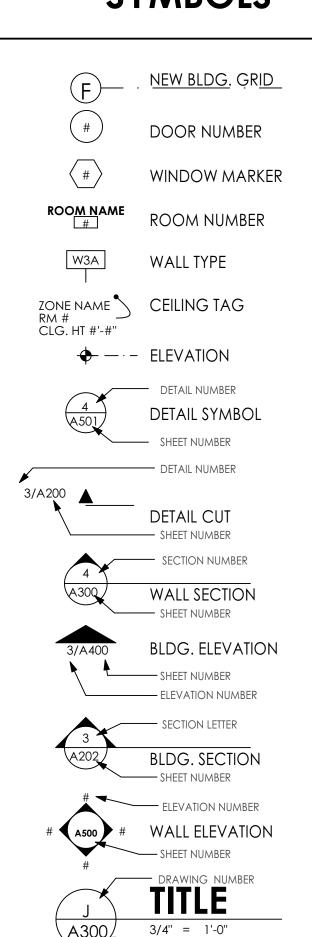
ARCH. JOB NUMBER: 23604 MAY 2023

G100

A RRDEVIATIONS

ACPS	ACOUSTIC CEILING PANEL SYSTEM	HVAC	HEATING, VENTING & AIR CONDITIONING
AC	AIR CONDITIONING	INSUL	INSULATION
ADJ	ADJUSTABLE	INT	INTERIOR
AFF	ABOVE FINISH FLOOR	LAM	LAMINATED
ALT	ALTERNATE	LOC	LOCATION
ALUM	ALUMINUM	LRG	LARGE
AV	AUDIO/ VISUAL	MAS	MASONRY
BRD	BOARD	MAX	MAXIMUM
BLDG	BUILDING	MECH	MECHANICAL
ВТМ	ВОТТОМ	MTL	METAL
CAB	CABINET	MANUF	MANUFACTURER
CG	CORNER GUARD	MHU	MOBILE HOME UNIT
CJ	CONTROL JOINT	MIN	MINIMUM
CLG	CEILING	MISC	MISCELLANEOUS
CLR	CLEAR	NA	NOT APPLICABLE
CMU	CONCRETE MASONRY UNIT	NO	NUMBER
COL	COLUMN	NOM	NOMINAL
CONC	CONCRETE	NTS	NOT TO SCALE
CONN	CONNECTION	OC or	ON CENTER OR CENTER LINE
CONT	CONTINUOUS	OFCI	OWNER FURNISHED - CONTRACTOR INSTALLED
DEMO	DEMOLITION	PT	PRESSURE TREATED
DTL	DETAIL	PART BRD	PARTICLE BOARD
DF	DRINKING FOUNTAIN	PLAN	PLASTIC LAMINATE
DIA	DIAMETER	PEJ	PETROLEUM EXPANSION JOINT
DIM	DIMENSION	PLY	PLYWOOD
DISP	DISPENSER	PRE-FIN	PRE-FINISHED
DR	DOOR	PWR	POWER
DWG	DRAWING	RCP	REFLECTED CEILING PLAN
DWR	DRAWER	RD	ROOF DRAIN
EΑ	EACH	REF	REFERENCE
EF	EXHAUST FAN	REINF	REINFORCEMENT
EIFS	EXT. INSUL. & FIN. SYSTEM	REQ	REQUIRED
EJ	EXPANSION JOINT	RM	ROOM
ELEC	ELECTRICAL	SHT	SHEET
EMER	EMERGENCY	SHTG	SHEATHING
EQ	EQUAL	SIM	SIMILAR
EQUIP	EQUIPMENT	SPEC	SPECIFICATIONS
ETR	EXISTING TO REMAIN	SQ	SQUARE
EXP	EXPOSED	SAN	SANITARY SEWER
EXPAN	EXPANSION	SS	SOLID SURFACE
EXT	EXTERIOR	SST	STAINLESS STEEL
FD	FLOOR DRAIN	STL	STEEL
FE	FIRE EXTINGUISHER	STOR	STORAGE
FEC	FIRE EXTINGUISHER CABINET	STRUCT	STRUCTURAL
FF	FINISH FLOOR	SUSP	SUSPENDED
FG	FINISH GRADE	TEMP	TEMPERATURE
FLR	FLOOR (ING)		
FTG	FOOTING	TERM	TERMINATION TOP OF FOOTING
		TOF	TOP OF PEARING
GA	GALVANIZED	TOB	TOP OF BEARING
GALV	GALVANIZED	TYP	TYPICAL
GL	GLASS	VERT	VERTICAL
HC	HOLLOW CORE	VT	VINYL TILE
		1	\A/ITLI
НМ	HOLLOW METAL	w/	WITH
HM MHU HORIZ	MOBILE HOME UNIT HORIZONTAL	w/ w/o WD	WITHOUT WOOD

SYMBOLS



= EXISTING

= ADD ALT (SCOPE)

= NEW CONSTRUCTION

= DEMOLITION

BUILDING DESCRIPTION

MANUFACTURED HOME UNIT(S) ARE PURCHASED BY THE OWNER (ITD). THE MANUFACTURED HOME PROVIDER WILL DELIVER THE UNIT(S), HOOKUP THE UNIT(S)

PAD WITH NEW MECHANICAL, PLUMBING AND ELECTRICAL PER THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW FULL JURISDICTION or IDOPL

BLDG. INFO.

OCCUPANCY CLASSIFICATION: (R) Residential (Manufactured Home) Manufactured Home: Homes built on/after June 15, 1976; federalized construction o one single, nation-wide standard (24 CFR §3280) under authority of the National Manufactured Housing Construction and Safety Standards Act of 1974, signed into PERMITTING THROUGH IDOPL (IDAHO DIVISION OF OCCUPATIONAL AND PROFESSIONAL LICENSES), REQUIRED PERMITTING: - INSTALLATION PERMIT and INSTALLATION TAG - ON-SITE MECHANICAL, PLUMBING AND ELECTRICAL PERMITTING

idahohousingassociation.org

dbs.ldaho.gov

ACTUAL MHU AREA:

LOCATION MAP



CONTACTS

CONSULTANTS

STRUCTURAL ENGINEER

FROST STRUCTURAL ENGINEERING 1020 LINCOLN ROAD IDAHO FALLS, IDAHO 83401 PHONE (208) 227-8404

CIVIL ENGINEER

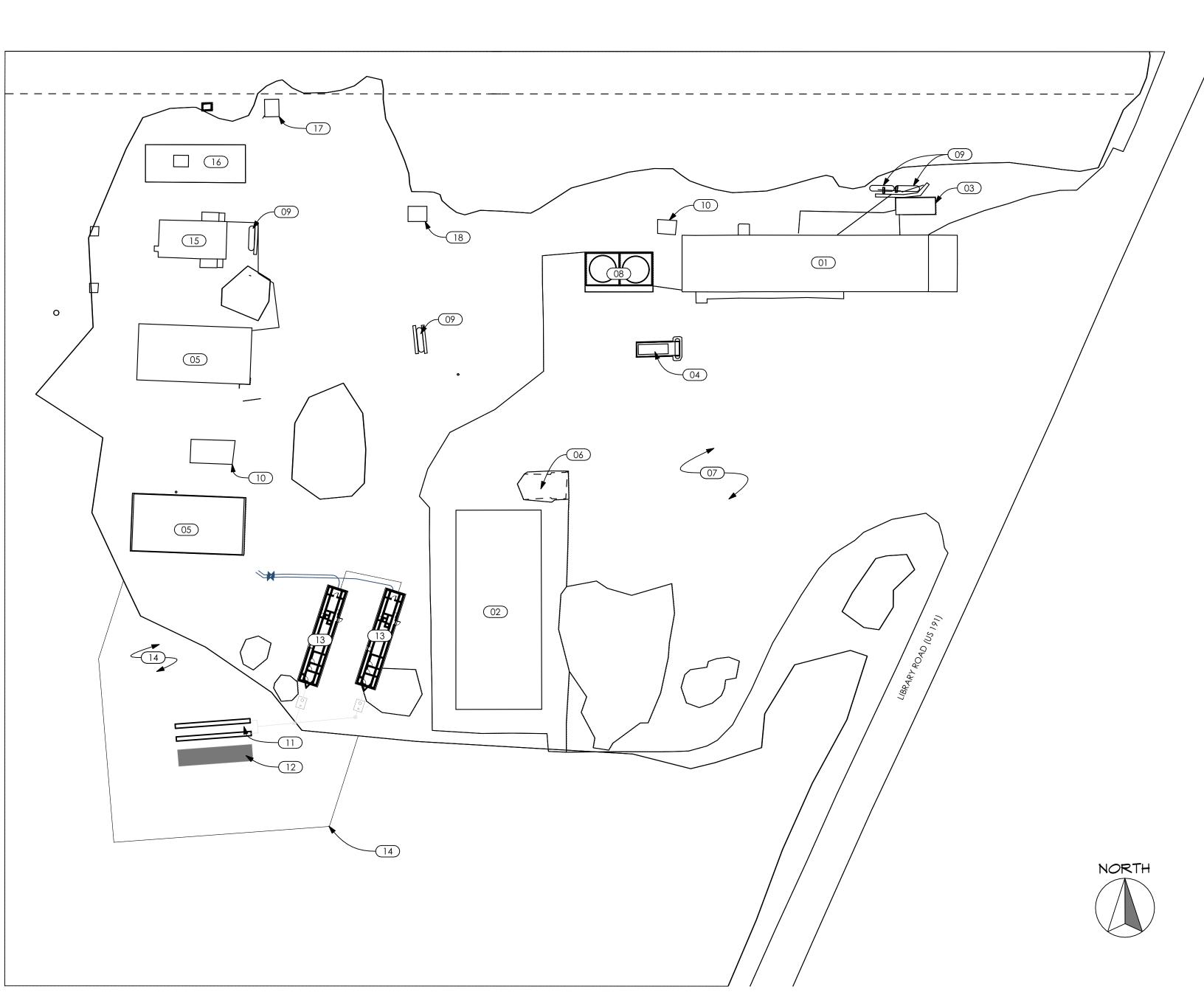
690 INDUSTRY WAY, SUITE 10

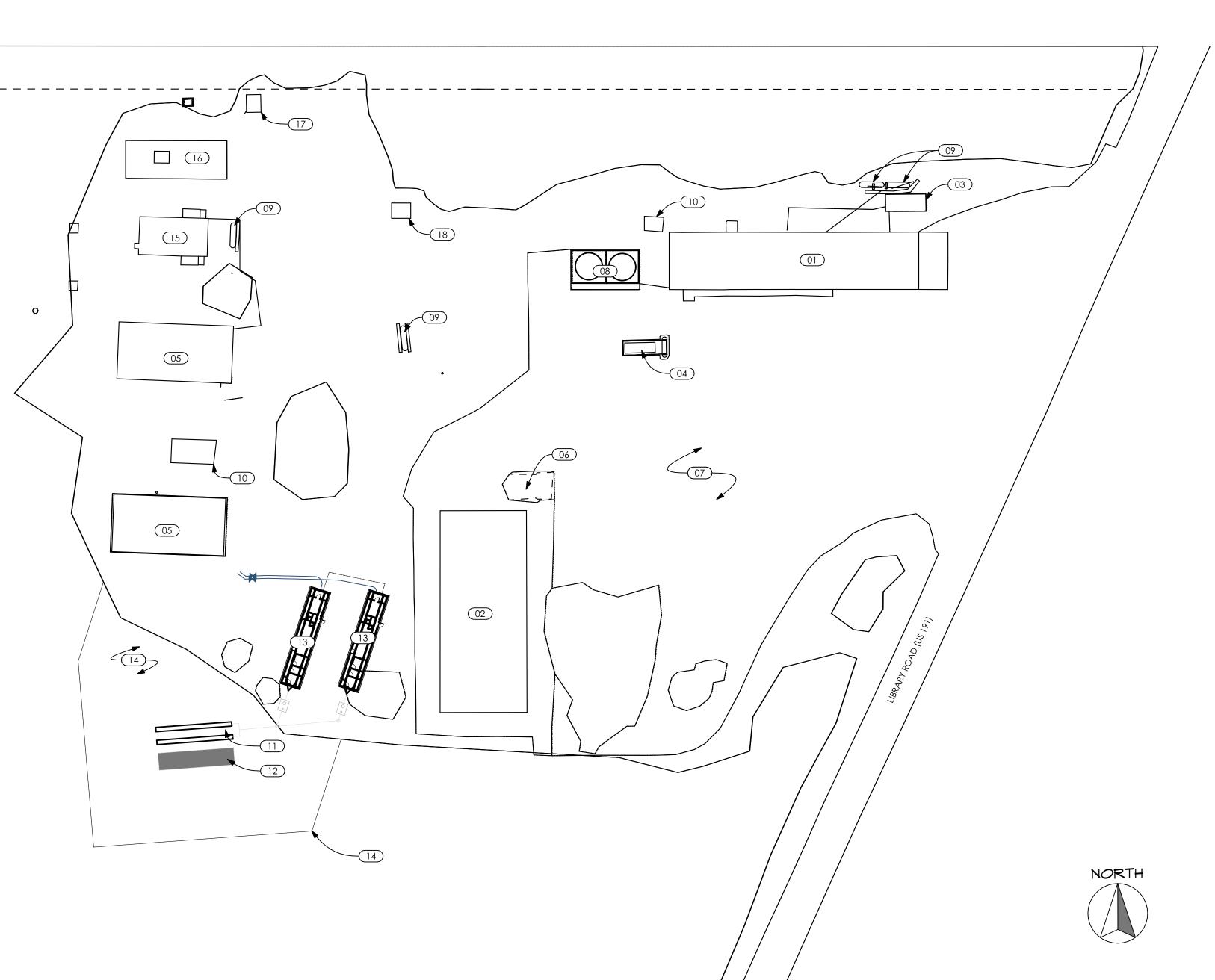
ELECTRICAL & PLUMBING ENGINEER

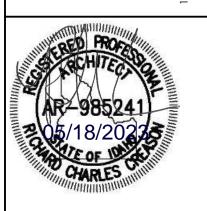
OWNER IDAHO TRANSPORTATION DEPARTMENT (ITD) 11331 WEST CHINDEN BLVD. BOISE, IDAHO 83714 CONTACT: JACOB JACKSON EMAIL: jackob.jackson@itd.idaho.gov **ARCHITECT** RICHARD CREASON 122 S. MAIN STREET SUITE 1 POCATELLO, ID 83240 PH: 208.232.3741 E-MAIL: richard@myersanderson.com

DEFERRED SUBMITTALS

MHU OR MANUFACTURED HOME UNIT PURCHASED BY OWNER AND NOT IN CONTRACTOR'S SCOPE. MHU TO BE SITE DELIVERED, HOOK-UP, CRAWL SPACE SKIRTING, AND LANDING WITH STAIRS BY MHU PROVIDER.







SHEET TITLE:

ARCHITECTURAL SITE PLAN

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION

ARCH. JOB NUMBER: 23604

DBS STAMP

MAY 2023

SP100

ARCHITECTURAL SITE PLAN

SITE PLAN KEYED NOTES

13) NEW MANUFACTURED HOME BY ITD. CONTRACTOR SHALL REMOVE ALL DEBRIS, VEGETATION AND ALL OTHER ITEMS ON SITE FOR NEW MANUFACTURED HOME.

14 EXISTING VEGETATION IN AREA OF WORK TO BE REMOVED BY CONTRACTOR, COORD. w/ CIVIL DRAWINGS.

01) EXISTING MAINTENANCE BUILDING TO REMAIN.

05) EXISTING COVERED MOBILE HOME TO REMAIN.

02 EXISTING SAND/ SALT BUILDING TO REMAIN. (03) EXISTING SAND AND GREASE TRAP TO REMAIN

04) existing fuel island to remain.

07 EXISTING ASPHALT TO REMAIN 08 EXISTING BRINE TANKS TO REMAIN

06 EXISTING LOADING RAMP TO REMAIN

09 EXISTING PROPANE TANKS TO REMAIN.

10 EXISTING SEPTIC TANK, SEE CIVIL.

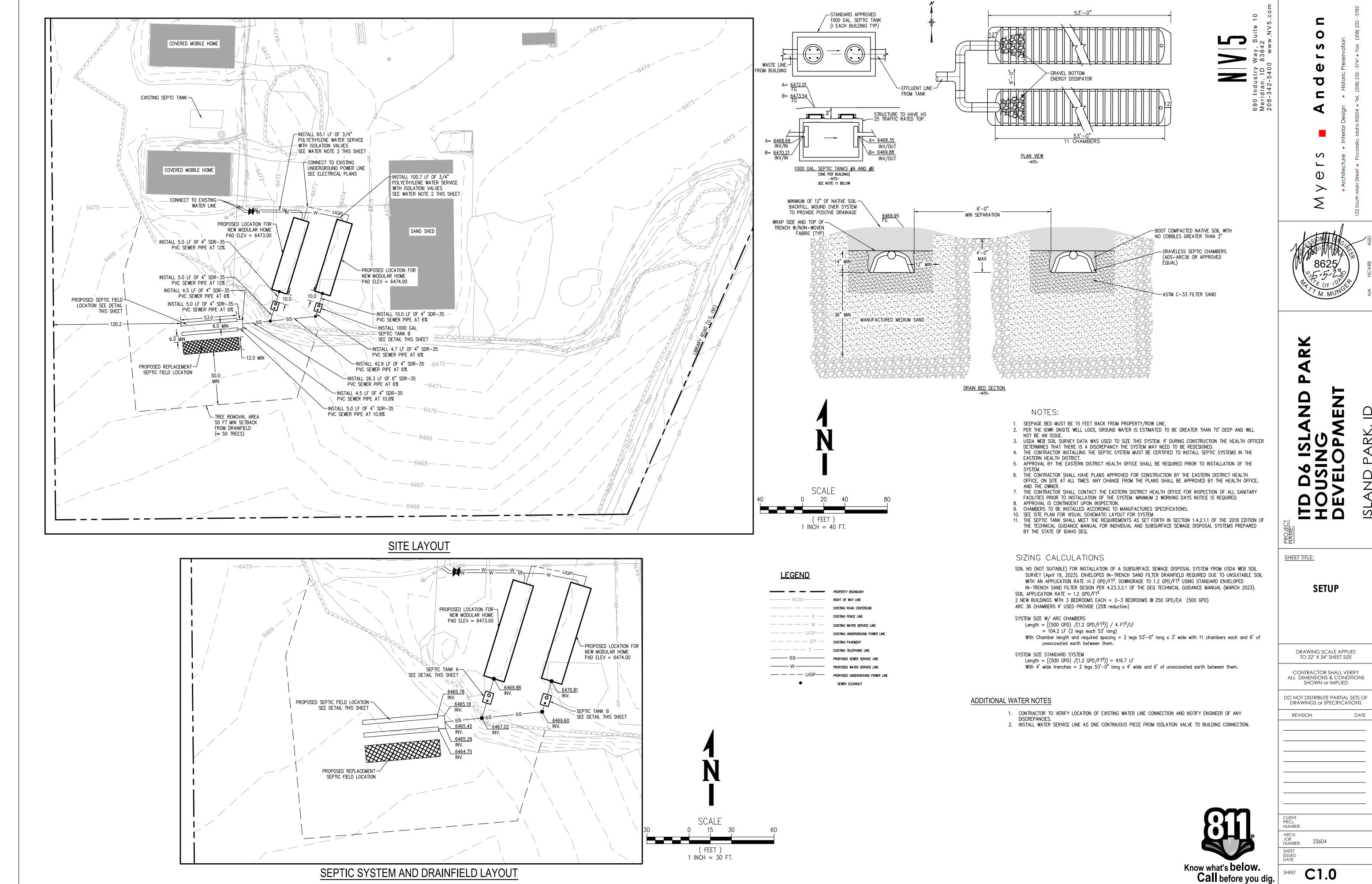
12) PROPOSED DRAIN FIELD. SEE CIVIL.

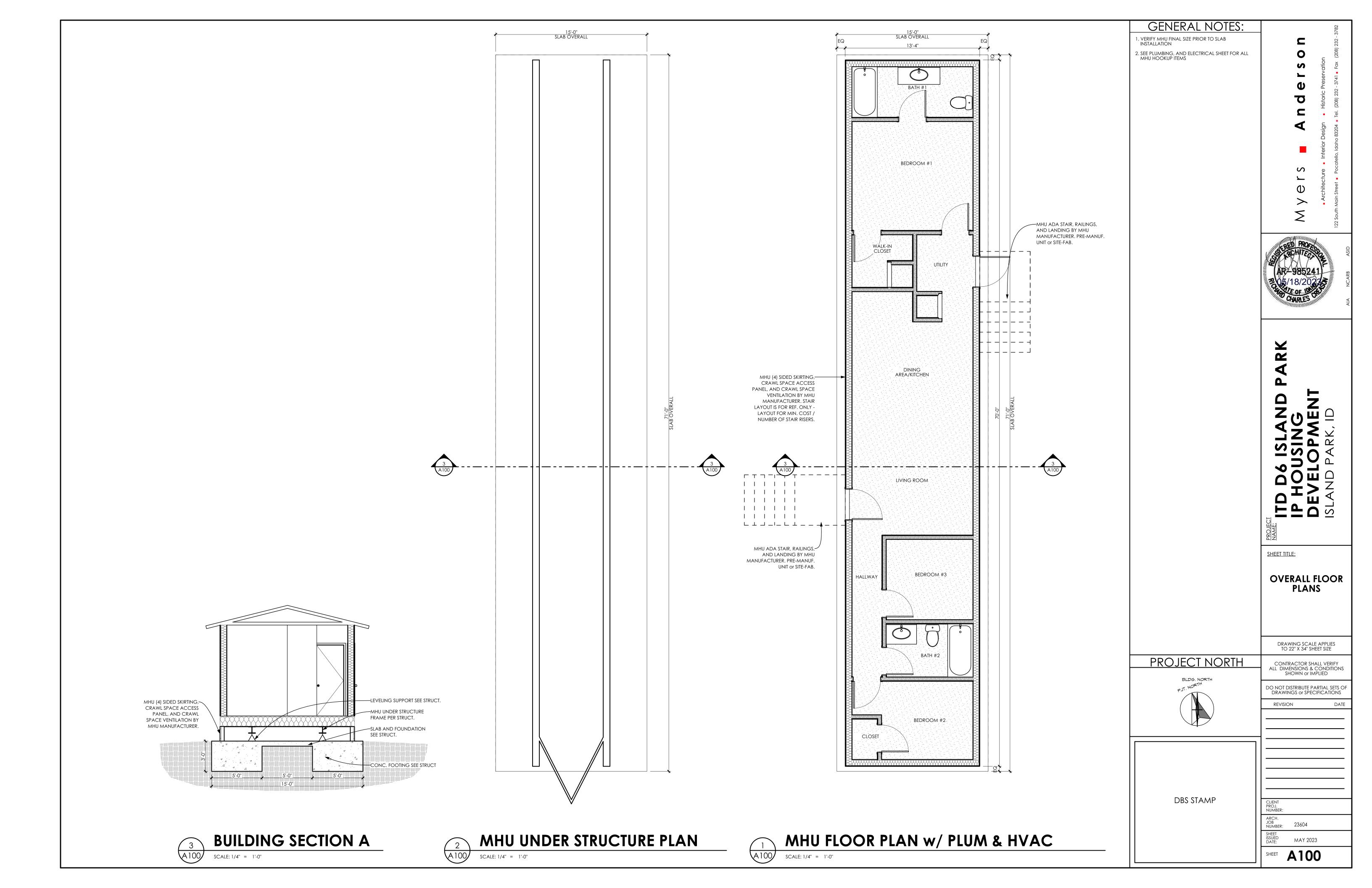
15 EXISTING ISP HOUSING TO REMAIN.

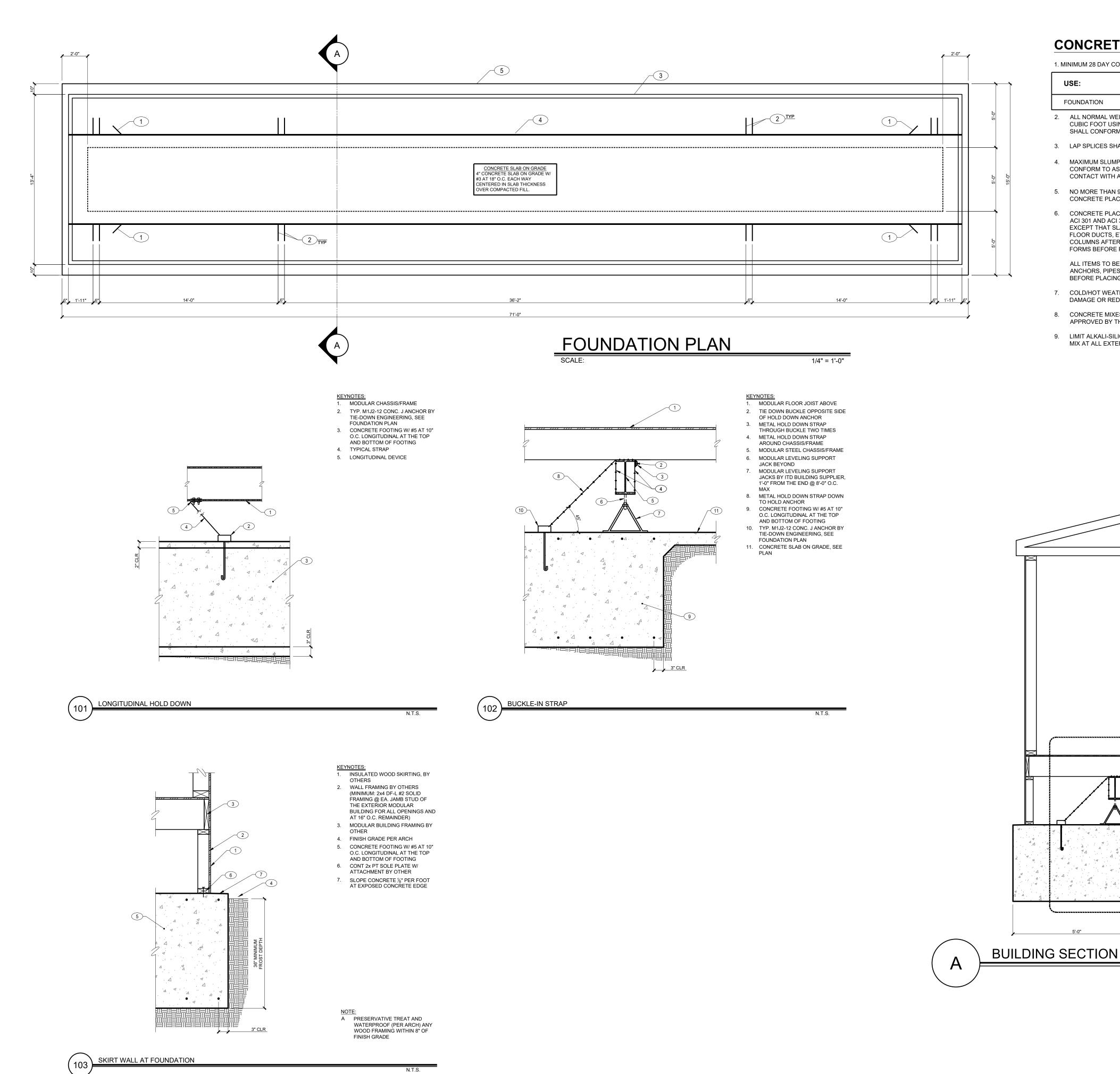
17 EXISTING STORAGE FOR ISP TO REMAIN. 18 EXISTING WELL HOUSE TO REMAIN

16 EXISTING RV SEPTIC CLEANOUT AND SHELTER TO REMAIN.

11) NEW SEPTIC TANK. SEE CIVIL.







CONCRETE:

1. MINIMUM 28 DAY CONCRETE STRENGTH SHALL BE AS FOLLOWS:

USE:	CONCRETE	MAX W/C	AIR
	STRENGTH:	RATIO	ENTRAINMENT
FOUNDATION	4500 PSI	0.45	5.5% ± 1%

- ALL NORMAL WEIGHT CONCRETE SHALL BE REGULAR WEIGHT OF 150 POUNDS PER CUBIC FOOT USING HARD-ROCK AGGREGATES. AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C33.
- 3. LAP SPLICES SHALL BE 12" FOR #3 BAR AND 24" FOR #5 BAR.
- MAXIMUM SLUMP FOR ALL CONCRETE SHALL BE 6". PORTLAND CEMENT SHALL CONFORM TO ASTM C150. TYPE V CEMENT SHALL BE USED FOR CONCRETE IN CONTACT WITH ALKALINE SOIL, AND TYPE II ELSEWHERE.
- NO MORE THAN 90 MINUTES SHALL ELAPSE BETWEEN CONCRETE BATCHING AND CONCRETE PLACEMENT UNLESS APPROVED BY THE TESTING AGENCY.
- CONCRETE PLACEMENT AND QUALITY SHALL BE PER RECOMMENDATIONS IN ACI 614, ACI 301 AND ACI 318. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THAT SLABS ON GRADE NEED BE VIBRATED ONLY AROUND AND UNDER FLOOR DUCTS, ETC. CAST CLOSURE POUR, WHERE SHOWN ON PLANS AROUND COLUMNS AFTER COLUMN DEAD LOAD IS APPLIED. REMOVE ALL DEBRIS FROM FORMS BEFORE PLACING CONCRETE.

ALL ITEMS TO BE CAST IN CONCRETE SUCH AS REINFORCING, DOWELS, BOLTS, ANCHORS, PIPES, SLEEVES, ETC., SHALL BE SECURELY POSITIONED IN THE FORMS BEFORE PLACING THE CONCRETE.

- COLD/HOT WEATHER CONCRETE CONSTRUCTION: PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH IN COMPLIANCE WITH ACI 305 AND 306.
- 8. CONCRETE MIXES SHALL BE DESIGNED BY A CERTIFIED LABORATORY AND APPROVED BY THE STRUCTURAL ENGINEER.
- LIMIT ALKALI-SILICA REACTION (ASR) TO 0.1% EXPANSION AT 28 DAYS IN CONCRETE MIX AT ALL EXTERIOR CONCRETE AND INTERIOR CONCRETE EXPOSED TO MOISTURE.

MODULAR BUILDING BY OTHER

_	
(X PLAN KEYNOTES
1.	LONGITUDINAL HOLD DOWN ANCHOR, SEE DETAIL 101
2.	TRANSVERSE HOLD DOWN ANCHOR, SEE DETAIL 102
3.	PERIMETER SKIRT WALL BY OTHERS, SEE DETAIL 103
4.	MODULAR CHASSIS/FRAME BEAM BY OTHER
5.	CONCRETE FOOTING, SEE DETAILS

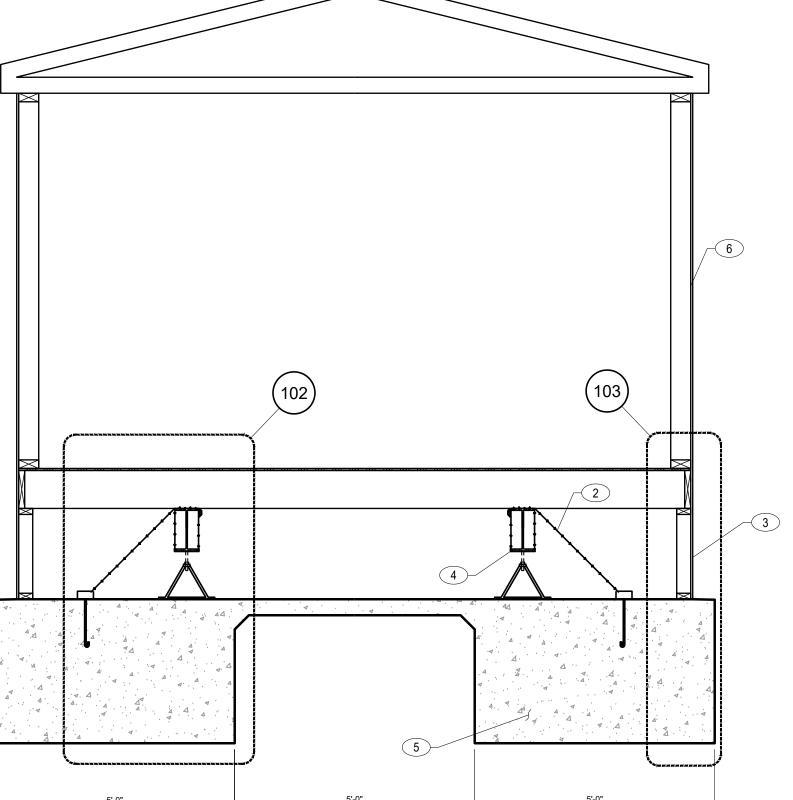
FOUNDATION PLAN NOTES

VERIFY ALL DIMENSIONS WITH ALL ARCHITECTURAL DRAWINGS.

THE DEPTH OF FOOTING DIMENSION INDICATED ON THE PLAN IS A MINIMUM. FOUNDATION CONTRACTOR SHALL COORDINATE WITH OTHER TRADES TO INSURE THAT THESE MINIMUMS ARE SUFFICIENT FOR THE WORK.

WALLS WITH SOLID LINES DESIGNATED STRUCTURAL (BEARING) WALLS.

- STRUCTURE TO BE LEVELED AND MODULES FULLY SUPPORTED PRIOR TO THE INSTALLATION OF HOLD DOWNS. MODULAR UNITS W/ OUTRIGGERS EXTENDING PAST TRANSPORT RAIL IN EXCESS OF 30 INCHES SHALL BE SUPPORTED ALONG THE PERIMETER AT NOT MORE THAN 8'-0" O.C. SHIM AND BLOCK AS NECESSARY TO INTERFACE PIERS W/ FLOOR MEMBERS.
- LATERAL HOLD DOWNS SHALL BE TIE-DOWN ENGINEERING, INC. OR APPROVED EQUAL.
- ANCHOR SHALL BE INSTALLED AT THE LOCATION INDICATED ON THE DRAWINGS, WET SET INTO FLOWABLE FILL. THE ANCHOR HAS A MIN. ALLOWABLE HOLDING FORE OF 3,150 POUNDS (WORKING STRESS) HORIZONTAL & VERTICAL STABILIZER DEVICE REQ'D AT EACH ANCHOR.
- FOR SIDEWALK AND LANDING LOCATION, SEE ARCHITECTURAL DRAWINGS.
- THE SOIL DESIGN VALUE OF 1500 PSF HAS BEEN APPROVED BY THE CITY/COUNTY BUILDING DEPARTMENT, CONTINGENT THAT THE SOIL ON THE SITE PREDOMINATELY CONSISTS OF SAND AND/OR GRAVEL. SPECIFIC SOIL CLASSIFICATIONS SHOULD BE ONE OF THE FOLLOWING: SANDY GRAVEL OR GRAVEL(GW OR GP), SAND(SW AND SP), SILTY SAND(SM), CLAYEY SAND(SC), SILTY GRAVEL(GM), OR CLAYEY GRAVEL(GC). THESE SOIL CLASSIFICATIONS CAN BE FOUND IN TABLE 1806.2 OF CHAPTER 18 OF THE IBC. VERIFICATION OF SOIL CLASSIFICATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL FOUNDATIONS SHALL BEAR ON COMPACTED ENGINEERED FILL OR COMPETENT NATIVE SOIL SUBBASE COMPACTED TO 95% DRY DENSITY (STANDARD PROCTOR). GRADE IS DEFINED AS LOWEST ADJACENT GRADE WITHIN 5 FEET OF THE BUILDING FOR PERIMETER FOOTINGS. WHERE EXTERIOR PAVING OR CONCRETE IS DIRECTLY ADJACENT TO BUILDING, GRADE IS DEFINED AS TOP OF EXTERIOR PAVING AT LEAST 5 FEET FROM BUILDING. CONCRETE FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF LOOSE DEBRIS OR UN-COMPACTED MATERIAL AT TIME OF CONCRETE
- CONCRETE SLABS ON GRADE SHALL BE SUPPORTED ON A 4 INCH (MIN) LAYER OF FREE-DRAINING GRANULAR MAT (DRAINAGE FILL COURSE). THE MAT SHOULD CONSIST OF A WELL GRADED SAND AND GRAVEL MIXTURE WITH MAXIMUM 3/4-INCH CRUSHED AGGREGATE. THE GRANULAR MAT SHOULD BE COMPACTED TO NO LESS THAN 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698



1/2" = 1'0"

PROJECT MANAGER: DBP CAD OPERATOR: ADH

This drawing is the property of FROST Structural Engineering, Inc. Legally, the drawing can NOT be copied in whole or in pieces. It is only to be used for the project and site specifically identified hereon and is not to be used on any other project. Contractor shall carefully review all dimensions, details, and conditions and report at once any error, inconsistency or omission discovered before construction. The contractor assumes full liability for deviations from the intent of these plans.

ructural Engineering

JOB NO.: IF23-200

1020 E. Lincoln Road

Idaho Falls, ID 83401

phone: 208.227.8404 fax: 208.227.8405 contact@frost-structural.com

\$1.0

SHEET TITLE:

De ISL USING

ARK

FOUNDATION PLAN

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN OR IMPLIED

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

DRAWN

NUMBER: 23604

PROJECT 5/12/23

MECHANICAL ABBREVIATIONS				
			1	
A/C or AC	AIR CONDITIONING	KW	KILOWATT	
	ABOVE FINISHED FLOOR	KWH	KILOWATT HOUR	
	AIR HANDLING UNIT	IXWII	NIEOW/(ITTIOOIX	
	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR			
ASHRAE	CONDITIONING ENGINEERS	LAT	LEAVING AIR TEMPERATURE	
	CONDITIONING ENGINEERO	LAV	LAVATORY	
BTU	BRITISH THERMAL UNITS	LEED	LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN	
	BTUS PER HOUR	LWT	LEAVING WATER TEMPERATURE	
CA	COMBUSTION AIR	MAX	MAXIMUM	
	COOLING COIL	MCA	MINIMUM CIRCUIT AMPS	
CFM	AIR FLOW RATE (CUBIC FEET PER MINUTE)	MOCP	MAXIMUM OVERCURRENT PROTECTION	
	CHILLED WATER RETURN	MIN	MINIMUM	
	CHILLED WATER SUPPLY			
CLG	CEILING	NC	NOISE CRITERIA	
	COLD WATER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION	
		NTS	NOT TO SCALE	
DEG or °	DEGREE			
	DIAMETER	OSA	OUTSIDE AIR	
	DRY BULB			
		PD	PRESSURE DROP	
EA	EXHAUST AIR	PH or Ø	PHASE	
	ENTERING AIR TEMPERATURE	PRV	PRESSURE REDUCING VALVE	
EER	ENERGY EFFICIENCY RATIO			
	EXTERNAL STATIC PRESSURE	RA	RETURN AIR	
EWT	ENTERING WATER TEMPERATURE	RPM	REVOLUTIONS PER MINUTE	
		RTU	ROOFTOP UNIT	
FCO	FLOOR CLEANOUT			
FD	FIRE DAMPER	SA	SUPPLY AIR	
	FULL LOAD AMPS	SEER	SEASONAL ENERGY EFFICIENCY RATIO	
	FLOOR	SFD	COMBINATION SMOKE/FIRE DAMPER	
FPM	FEET PER MINUTE	SP	STATIC PRESSURE	
FT	FEET	SYM	SYMBOL	
	GAUGE	T&P	TEMPERATURE AND PRESSURE	
GCO	GRADE CLEANOUT	TEMP	TEMPERATURE	
GPM	WATER FLOW RATE (GALLONS PER MINUTE)	TYP	TYPICAL	
	HEATING COIL	UMC	UNIFORM MECHANICAL CODE	
HP	HORSE POWER	UPC	UNIFORM PLUMBING CODE	
	HEATING, VENTILATING, AIR CONDITIONING	URL	URINAL	
HW	HOT WATER			
HWR	HOT WATER RETURN	VTR	VENT THROUGH ROOF	
HWS	HOT WATER SUPPLY	V	VOLTS	
IBC	INTERNATIONAL BUILDING CODE	W/	WITH	
IEEC	INTERNATIONAL ENERGY CONSERVATION CODE	WB	WET-BULB	
IFC	INTERNATIONAL FIRE CODE	WC	WATER CLOSET	
IFGC	INTERNATIONAL FUEL GAS CODE	WCO	WALL CLEANOUT	
IMC	INTERNATIONAL MECHANICAL CODE	WH	WATER HEATER	
IPC	INTERNATIONAL PLUMBING CODE			
NOTE	THIS IS A STANDARD LIST OF COMMONLY USED MECHANICAL	ABBREVIAT	IONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT	
NOTE:	BE USED IN THIS DRAWING PACKAGE.	• • •		

MECHANICAL GENERAL NOTES

- ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE (IMC) LATEST EDITION, AND ALL LOCAL & STATE CODES.
- ALL PLUMBING EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST ADOPTED PLUMBING CODE, AND ALL LOCAL & STATE CODES.
- ALL MECHANICAL AND PLUMBING EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
- MECHANICAL CONTRACTORS SHALL RECEIVE PRIOR APPROVAL FROM THE STRUCTURAL ENGINEER BEFORE MAKING CUTS THROUGH ANY STRUCTURAL MEMBER.
- MECHANICAL CONTRACTORS SHALL COORDINATE INSTALLATION WITH CONSTRUCTION SUPERVISOR AND WITH ALL OTHER
- THE MECHANICAL CONTRACTORS SHALL VERIFY MOTOR VOLTAGES WITH THE ELECTRICAL DRAWINGS BEFORE ORDERING MOTORIZED EQUIPMENT AND CONTROLS.
- SEE MECHANICAL SCHEDULE SHEET FOR SCHEDULED CAPACITIES OF ALL MECHANICAL EQUIPMENT AND MATERIALS SPECIFIED.
- DOMESTIC WATER SERVICE IS PROVIDED WITH A DOUBLE CHECK BACKFLOW PREVENTER.

LOCATED ABOVE HARD CEILINGS.

- 9. ALL MECHANICAL EQUIPMENT TO BE PROPOSED MUST BE ON THE APPROVED LIST PRIOR TO SUBMITTALS. ALL APPROVED MANUFACTURERS MUST BE CAPABLE OF MEETING THE REQUIREMENTS OF THE SPECIFIED EQUIPMENT.
- 10. RUNOUT AND HOOKUP SIZES TO INDIVIDUAL PLUMBING FIXTURE CAN BE FOUND ON THE PLUMBING FIXTURE SCHEDULE.
- 11. PROVIDE REMOTE CEILING ACCESS BALANCE DAMPERS WITH CONCEALED CHROME PLATE COVERS FOR BALANCE DAMPERS
- 12. PAINT ALL VTR'S, FLUES, EXHAUST CAPS, AND OTHER MECHANICAL ITEMS ON THE ROOF TO MATCH THE ROOF COLOR.
- 13. INSULATED FLEXIBLE DUCTWORK MAY BE USED FOR RUNOUTS TO GRILLES AND DIFFUSERS, IN LENGTHS OF 6'-0" OR LESS.
- 14. MAINTAIN MINIMUM OF 10'-0" DISTANCE BETWEEN ALL FRESH AIR INTAKES AND EXHAUST OR GAS FLUE DISCHARGES.
- 15. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL BACKFLOW DEVICES TO BE INSPECTED BY A CERTIFIED BACKFLOW TECHNICIAN BEFORE THE USE OF THE BUILDING POTABLE WATER SYSTEM.
- LOCATE ACCESS HATCHES SO AS TO PROVIDE OPTIMUM SERVICEABILITY TO EQUIPMENT AND/OR VALVING. SEE ARCHITECTURAL SPECIFICATION FOR TYPE AND COLOR. COORDINATE LOCATION WITH STRUCTURAL & LIGHTING.
- 17. WHENEVER THERE IS A DISCREPANCY BETWEEN THE RUNOUT DUCT SIZE SHOWN ON THE PLANS AND THAT SHOWN IN THE SCHEDULE, ALWAYS USE THE LARGER OF THE TWO DUCT SIZES.
- 18. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR VERIFICATION OF EXISTING JOB CONDITIONS PRIOR TO BID. NO ADDITIONAL COST SHALL BE AWARDED TO THE SUCCESSFUL CONTRACTOR (OR THEIR SUBCONTRACTORS) AFTER BIDS HAVE BEEN SUBMITTED AND CONTRACTS AWARDED FOR FAILURE TO VERIFY EXISTING FIELD CONDITIONS. DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION FOR ALTERNATIVE METHODS OF INSTALLATION PRIOR TO THE BIDDING OF THIS PROJECT.
- 19. UNLESS OTHERWISE NOTED ALL EXISTING MECHANICAL EQUIPMENT, PIPING, ETC, TO BE REMOVED SHALL BE DISPOSED OF BY THE CONTRACTOR UNDER THIS CONTRACT. THE OWNER SHALL RETAIN THE RIGHT TO KEEP ANY REMOVED ITEMS.
- 20. ALL DOMESTIC COLD AND HOT WATER LINES IN THE AREA OF WORK WHICH ARE NO LONGER IN USE DUE TO THIS PROJECT SHALL BE REMOVED BACK TO THE MAINS AND CAPPED.
- 21. HOLES IN EXISTING WALL OR FLOORS SHALL BE PATCHED TO MATCH EXISTING WHERE PIPING, DUCTWORK, ETC. WERE REMOVED
- 22. DAMAGE TO THE EXISTING FACILITY DURING THE CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.

MECHANICAL AND PLUMBING DRAWINGS **LEGEND** THREE WAY CONTROL VALVE FLEXIBLE DUCTWORK TWO WAY CONTROL VALVE **DUCTWORK BREAK** PRESSURE REDUCING VALVE DUCTWORK OR PIPING RISE GATE VALVE CONCENTRIC SQUARE TO ROUND REDUCER M---MOTORIZED DAMPER GLOBE VALVE MANUAL VOLUME DAMPER Ö BALL VALVE SPIN-IN FITTING W/ AIR EXTRACTOR AND **BUTTERFLY VALVE** AIRFLOW -HAND DAMPER HIGH EFFICIENCY FITTING W/ HAND DAMPER BALANCE VALVE AIRFLOW ---**SWITCH** CHECK VALVE FCO FLOOR CLEANOUT THERMOSTAT WCO WALL CLEANOUT HUMIDISTAT GCO GRADE CLEANOUT TEMPERATURE SENSOR WATER HAMMER ARRESTOR CARBON DIOXIDE SENSOR CARBON MONOXIDE SENSOR FLOOR DRAIN NITROGEN DIOXIDE SENSOR GAS PRESSURE REGULATOR W/ GAS COCK DUCT SMOKE DETECTOR PRESSURE RELIEF VALVE COMBINATION SMOKE/FIRE DAMPER VENT-THROUGH-ROOF FIRE DAMPER SMOKE DAMPER ---- VENT SOIL, WASTE, OR SANITARY SEWER **EQUIPMENT CALLOUT** ACID WASTE LINE TURNING VANES INTAKE OR EXHAUST -- AV -- ACID VENT LINE DIRECTION OF AIRFLOW SUPPLY DIFFUSER ROOF DRAIN LINE RETURN GRILLE OVERFLOW DRAIN LINE **EXHAUST GRILLE** CONDENSATE DRAIN LINE ∫ DOMESTIC COLD WATER (CW) FLOOR GRILLE CEILING EXHAUST FAN ∫ DOMESTIC HOT WATER (HW) ∫ DOMESTIC HOT WATER RETURN (HWR) TEMPERATURE GAUGE PRESSURE GAUGE (LIQUID FILLED W/ TEMPERED WATER (TW) ISOLATION VALVE) TEMPERATURE SENSOR (DUCT OR PIPING) → MPG → MEDIUM PRESSURE NATURAL GAS FLOW SWITCH ∫ G LOW PRESSURE NATURAL GAS STAINLESS STEEL BRAIDED FLEX ——— F ———— FIRE SPRINKLER LINE CONNECTION ELASTOMETRIC FLEX CONNECTOR GEOTHERMAL WATER SUPPLY SUCTION DIFFUSER GEOTHERMAL WATER RETURN Y TYPE STRAINER (1 1/2" OR LARGER CHILLED WATER SUPPLY PROVIDED W/ BLOW DOWN VALVE) FLOW DIRECTION CHILLED WATER RETURN DEMOLITION / EQUIPMENT TO BE REMOVED CONDENSER WATER SUPPLY CR———— CONDENSER WATER RETURN NEW TO EXISTING CONNECTION POINT **EXISTING** HEATING WATER SUPPLY **FUTURE** HEATING WATER RETURN NEW LIQUID REFRIGERANT LINE REDUCED PRESSURE BACKFLOW SUCTION REFRIGERANT LINE PREVENTER DOUBLE CHECK BACKFLOW PREVENTER → SLOPE PIPE IN DIRECTION OF ARROW AIR VENT → PIPE GUIDE

TRIPLE DUTY VALVE

MAY NOT BE USED IN THIS DRAWING PACKAGE.

THIS IS A LIST OF COMMONLY USED MECHANICAL AND PLUMBING SYMBOLS. SOME OF THE SYMBOLS SHOWN ABOVE

ENERGY CODE COMPLIANCE

- COMPLIANCE WITH THE LATEST ADOPTED EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE IS REQUIRED FOR THIS PROJECT. THESE NOTES COVER MANDATORY REQUIREMENTS OF THE CODE. ADDITIONAL REQUIREMENTS ARE NOTED ON THE DRAWINGS AND IN THE SPECIFICATIONS.
- MINIMUM REQUIREMENTS FOR SUPPLY AND RETURN DUCTWORK INSULATION:
 - 1. R-6: DUCTS LOCATED IN UNCONDITIONED SPACES (SPACE NEITHER HEATED NOR COOLED SUCH AS ABOVE CEILING SPACES, WALL SPACES, DUCT CHASES, SOFFITS, ATTICS, CRAWL SPACES, UNHEATED BASEMENTS, AND UNHEATED GARAGES).
 - 2. R-12: DUCTS LOCATED OUTSIDE OF THE BUILDING'S INSULATION ENVELOPE (SUCH AS ABOVE THE ATTIC INSULATION).
 - TYPICAL INSULATION THICKNESS REQUIRED TO MEET THESE REQUIREMENTS:
 - DUCT WRAP: R-6 = 1-1/2" R-12 = 4"
 - DUCT LINER: R-6 = 1-1/2" R-12 = 3"
 - CONTRACTOR SHALL VERIFY WITH THE MANUFACTURER, THE R-VALUES OF THE ACTUAL INSULATION USED. R-VALUES SHALL BE INSTALLED VALUES.
- WHERE DUCTS USED FOR COOLING ARE EXTERNALLY INSULATED, THE INSULATION SHALL BE COVERED WITH A VAPOR RETARDER HAVING A MAXIMUM PERMEANCE OF 0.05 PERM OR ALUMINUM FOIL HAVING A MINIMUM THICKNESS OF 2 MILS. INSULATION HAVING A PERMEANCE OF 0.05 PERMS OR LESS SHALL NOT BE REQUIRED TO BE COVERED. ALL JOINTS AND SEAMS SHALL BE SEALED TO MAINTAIN THE CONTINUITY OF THE VAPOR RETARDER.
- ALL DUCT JOINTS, SEAMS, AND CONNECTIONS SHALL BE FASTENED AND SEALED WITH WELDS, GASKETS, ADHESIVES, MASTIC-PLUS-EMBEDDED-FABRIC SYSTEMS, OR TAPES. TAPES AND MASTICS SHALL BE LISTED AND LABELED PER UL181A OR UL181B. DUCT TAPE IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS. DUCT CONNECTIONS TO FLANGES OR EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED.
- DOMESTIC HOT WATER PIPING SYSTEMS SHALL BE INSULATED WITH 1" INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING 0.27
- DOMESTIC WATER HEATERS WHICH ARE NOT PROVIDED WITH INTEGRAL HEAT TRAPS AND SERVE NONCIRCULATING SYSTEMS SHALL BE PROVIDED WITH HEAT TRAPS ON THE SUPPLY AND DISCHARGE PIPING AT THE WATER HEATER.
 - DOMESTIC HOT WATER SYSTEMS WITH RECIRCULATION PUMPS OR ELECTRIC HEAT TRACE SHALL BE CONTROLLED WITH 7-DAY TIME CLOCKS.
- AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE O&M MANUAL SHALL CONTAIN THE FOLLOWING INFORMATION AS A MINIMUM:
- 1. EQUIPMENT CAPACITY (INPUT & OUTPUT).
- 2. EQUIPMENT OPERATING AND MAINTENANCE INSTRUCTIONS.
- 3. CONTROL SYSTEM MAINTENANCE AND CALIBRATION INFORMATION, INCLUDING WIRING DIAGRAMS, SCHEMATICS, AND CONTROL SEQUENCES.
- 4. CONTROL SYSTEM SETPOINTS SHALL BE SHOWN ON CONTROL DRAWINGS, AT CONTROL DEVICES, OR IN PROGRAMMING
- 5. A COMPLETE WRITTEN NARRATIVE ON HOW EACH MECHANICAL SYSTEM IS INTENDED TO OPERATE.



ENGINEERING, P.A 234 S. Whisperwood Way Boise, ID 83709 208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862

MUSGROVE www.musgrovepa.com Project No. 23-182



S

Ф

S

MECHANICAL **PLANS**

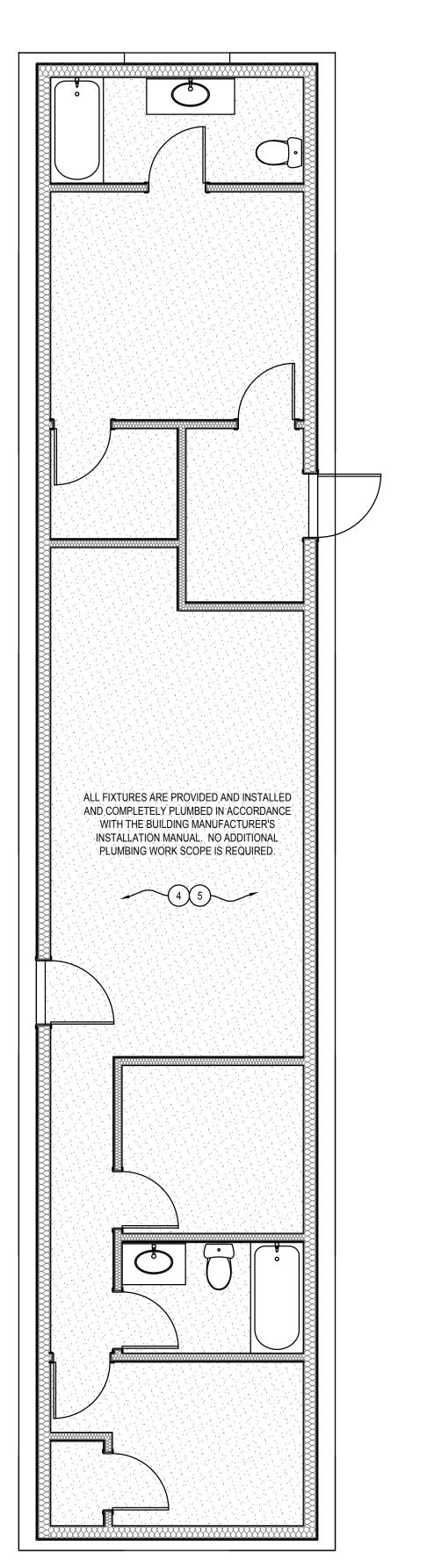
DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

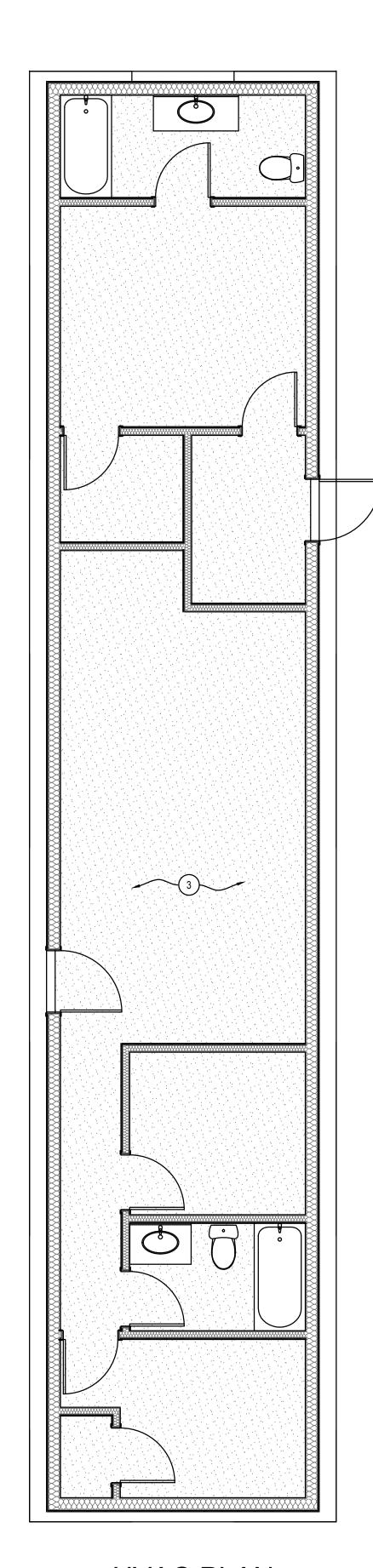
DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS REVISION DATE

NUMBER: 23604

P0.0





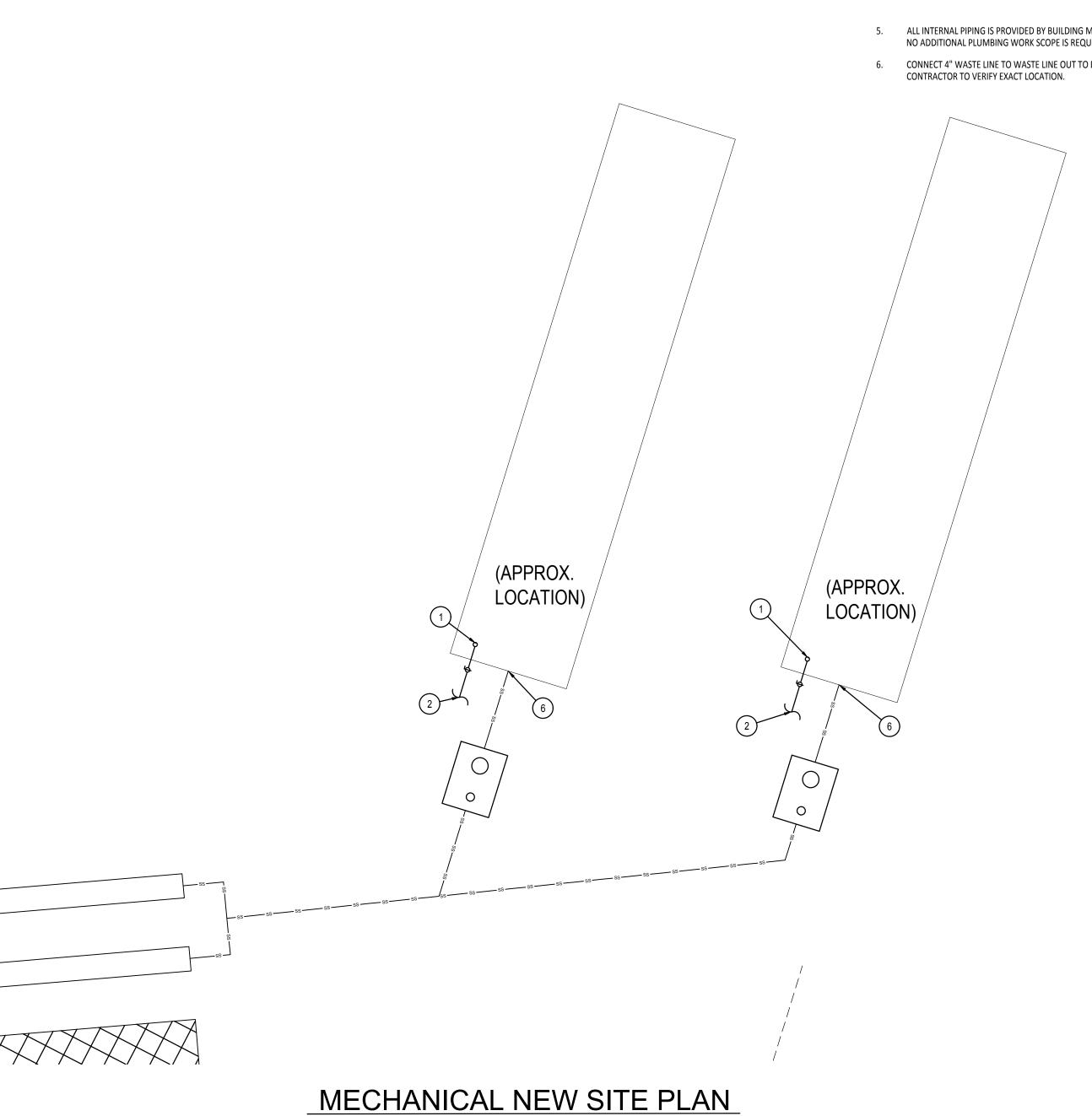


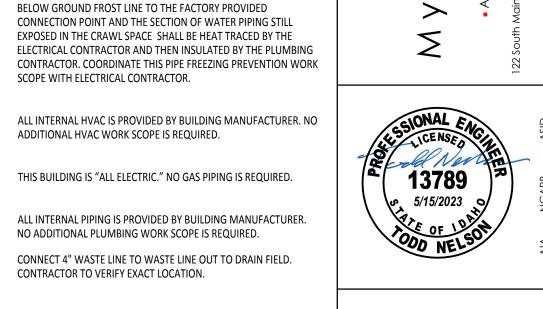
HVAC PLAN



- 1. CONTRACTOR TO INSTALL 1" WATER LINE SEE CIVIL FOR CONNECTION POINT. CONTRACTOR SHALL FOLLOW INSTALLATION INSTRUCTION AS OUTLINED IN BUILDING MANUAL, INCLUDING: FLUSHING / CLEANING THE THREADS / CONFIRMING THE INLET PRESSURE IS BELOW 80 PSI (IF ABOVE 80 PSI, THEN A PRESSURE REDUCING STATION WILL BE REQUIRED) / CONNECTING THE MAIN BUILDING'S ISOLATION VALVE IN ACCESSIBLE LOCATION WITH SIGN / AND FINALIZING ALL REQUIRED TESTS - HYDROSTATIC TEST IS PREFERRED. DO NOT INSTALL HOSE BIBB ON THIS BUILDING.
- 2. IT SHOULD BE NOTED THAT THE SECTION OF WATER PIPING FROM BELOW GROUND FROST LINE TO THE FACTORY PROVIDED CONNECTION POINT AND THE SECTION OF WATER PIPING STILL EXPOSED IN THE CRAWL SPACE SHALL BE HEAT TRACED BY THE ELECTRICAL CONTRACTOR AND THEN INSULATED BY THE PLUMBING CONTRACTOR. COORDINATE THIS PIPE FREEZING PREVENTION WORK SCOPE WITH ELECTRICAL CONTRACTOR.
- ALL INTERNAL HVAC IS PROVIDED BY BUILDING MANUFACTURER. NO ADDITIONAL HVAC WORK SCOPE IS REQUIRED.
- 4. THIS BUILDING IS "ALL ELECTRIC." NO GAS PIPING IS REQUIRED.
- 5. ALL INTERNAL PIPING IS PROVIDED BY BUILDING MANUFACTURER. NO ADDITIONAL PLUMBING WORK SCOPE IS REQUIRED.
- CONTRACTOR TO VERIFY EXACT LOCATION.







208.384.0585 645 West 25th Street

S

SHEET TITLE:

MECHANICAL PLANS

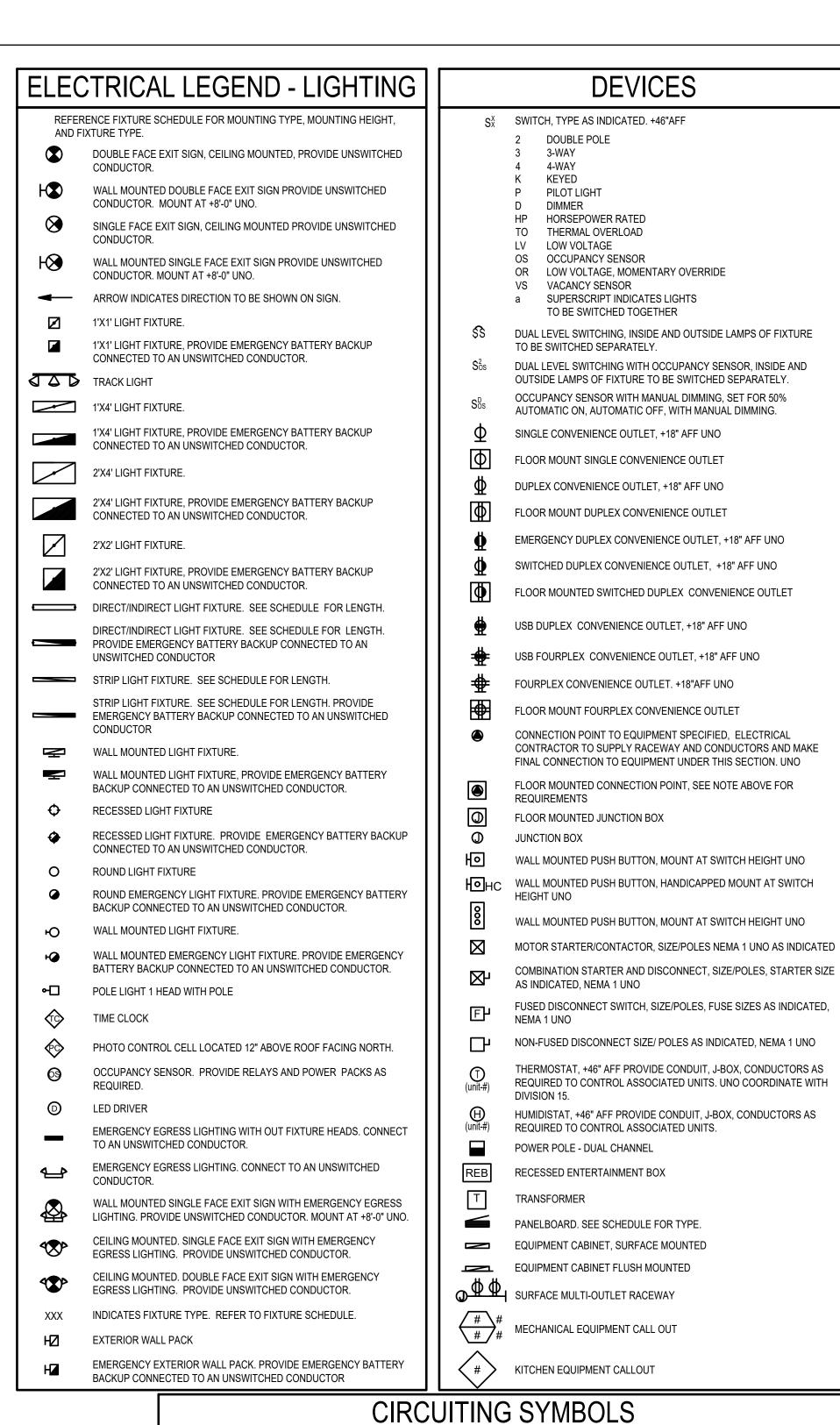
DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION

SHEET P1.0



DESIGNATES CIRCUIT ON -

CEILING OR WALL, MAINTAIN

CONDUIT AND CONDUCTOR SIZE

THROUGHOUT ENTIRE CIRCUIT.

BEGINNING OF INDIVIDUAL ——

CIRCUIT(S), CIRCUIT NUMBER(S)

CONDUIT DOWN &

UNMARKED CIRCUIT IS CONCEALED IN ———

○ CONDUIT UP

CONDUIT, STUBBED, CAPPED AND MARKED

WITH PULL CORD AS SPECIFIED

- CONCEALED IN FLOOR OR

UNDERGROUND

EMERGENCY SOURCE

INDICATED.

EXISTING -

ONE LINE DELTA WYE TRANSFORMER UNO NAME PANEL BOARD, SEE SCHEDULE FOR TYPE AND SIZE VOLTAGE PHASE ##A CIRCUIT BREAKER, SIZE AND POLES INDICATED FUSE, SIZE AND TYPE INDICATED, PROVIDE FUSE FOR EACH POLE ##A INTERRUPTER SWITCH, SIZE AND POLES INDICATED ##A FUSED SWITCH, SIZE/POLES AND FUSE SIZE INDICATED DRAW OUT CIRCUIT BREAKER, SIZE AND POLES INDICATED INDIVIDUAL BREAKER WITH SHUNT TRIP. SIZE AND POLES INDICATED. NEMA 1 UNO INDIVIDUAL BREAKER, SIZE AND POLES INDICATED. NEMA 1 UNO GFP **GROUND FAULT PROTECTION** TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION LSIGR — ADJUSTABLE BREAKER SETTINGS (PER SPECIFICATIONS): 'L'-LONG TIME 'S'-SHORT TIME 'I'-INSTANTANEOUS 'G'-GROUND FAULT 'R'-ENERGY REDUCING MAINTENANCE SWITCH W/STATUS INDICATOR # GROUND SHUNT TRIP COIL MOTOR JDISCONNECT SWITCH, SIZE AND POLES INDICATED. NEMA 1 UNO OVERHEAD SERVICE DROP GENERATOR SET, MAIN BREAKER SIZE INDICATED AUTOMATIC TRANSFER SWITCH (ATS) METER AND BASE

DRY TYPE TRANSFORMER

CURRENT CARRYING

NEUTRAL CONDUCTORS

— GROUNDING CONDUCTOR

— PANEL NAME

—— CIRCUIT #

PANEL HOMERUN. (3/4"-2#12,1#12G CONDUCTORS UNO) 1"-4#10.1#10G

EDISON STYLE SHARED NEUTRAL CONDUCTORS ARE NOT ALLOWED.

EACH 1 POLE BREAKER SHALL BE FURNISHED WITH AN INDIVIDUAL

DEDICATED NEUTRAL CONDUCTOR.

CONDUCTORS

PAD MOUNT TRANSFORMER

NEUTRAL

CF COMPACT FLUORESCENT CKT CIRCUIT CO CT CTL DEMO DEMOLITION DET DETAIL DTT DOUBLE TWIN J-BOX JUNCTION BOX

ELECTRICAL ABBREVIATIONS

AMPERES 6" ABOVE BACKSPLASH ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE

AMPS INTERRUPTING CAPACITY

AUTOMATIC TRANSFER SWITCH

CONDUIT ONLY, PROVIDE PULL-LINE

CURRENT TRANSFORMER

AMERICAN WIRE GAUGE

BOTTOM OF STRUCTURE

BOTTOM OF DECK

CEILING MOUNTED

CIRCUIT BREAKER

CONTROL

DEMOLITION

EMERGENCY

EXISTING

FUTURE FACP FIRE ALARM CONTROL PANEL

EMERGENCY LIGHT

ELECTRICAL CONTRACTOR

DOUBLE TWIN TUBE

GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT INTERRUPTER

HAND HOLE HIGH INTENSITY DISCHARGE HAND-OFF-AUTO

HIGH PRESSURE SODIUM HVAC HEATING, VENTILATION, & AIR CONDITIONING

ISOLATED GROUND IPCO IDAHO POWER COMPANY

KVA KILO VOLT-AMP

KWH KILOWATT HOUR LCP LIGHTING CONTROL PANEL

MAIN CIRCUIT BREAKER MOTOR CONTROL CENTER MAIN DISTRIBUTION PANEL MAIN LUGS ONLY

MODULAR METERING CENTER METAL HALIDE MAIN SWITCH BOARD MOUNTING

NEW NORMALLY CLOSED NEC

NATIONAL ELECTRICAL CODE NOT IN CONTRACT NIGHT LIGHT

NORMALLY OPEN NTS NOT TO SCALE

OVERHEAD OCCUPANCY SENSOR

PHOTO-CONTROL PVC POLYVINYL CHLORIDE PWR POWER

REFERENCE RECEPTACLE RELOCATED

SF SQUARE FEET

TBD TO BE DETERMINED TDR TIME DELAY RELAY TK TOE KICK

TSP TWISTED SHIELDED PAIR TRT TRIPLE TUBE TTB TELEPHONE TERMINAL BOARD (TYP.) TYPICAL

UNDERCABINET UNDERGROUND U.N.O. UNLESS NOTED OTHERWISE

VA VOLT-AMPERE

W WATT WG WIRE GUARD WP WEATHER PROOF/NEMA 3R

PROVIDED/ PROVIDE AND INSTALL / PROVIDED AND PROVIDE BY INSTALLED BY / PROVIDE AND INSTALL INSTALLED/ INSTALL

THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.



- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCALLY ADOPTED ELECTRICAL CODE. ALL LOCAL CODES. AND TO THE FULL ACCEPTANCE OF THE AUTHORITY HAVING JURISDICTION.
- OBTAIN ALL PERMITS, COORDINATE, FURNISH, INSTALL, CONNECT AND TEST ALL ELECTRICAL EQUIPMENT REQUIRED FOR ALL THE SYSTEMS INSTALLED UNDER THIS CONTRACT TO INSURE COMPLETE AND FULLY OPERATIONAL
- CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF AS-BUILT DRAWINGS. AS-BUILT SET OF DRAWINGS SHALL BE UPDATED DAILY AND SHALL DOCUMENT THE ACTUAL INSTALLED CONDITION OF THE ENTIRE ELECTRICAL INSTALLATION. AS-BUILT SET OF DRAWINGS SHALL BE AVAILABLE AT ALI TIMES ON THE SITE FOR INSPECTION BY CODE OFFICIALS, OWNER, ARCHITECT, AND ENGINEER.
- PROTECT ALL EXISTING WORK FROM DAMAGE DURING CONSTRUCTION.
- DESIGN IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS THEY RELATE TO THE SCOPE OF WORK AS SHOWN ON THESE
- COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES.
- COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS OF ALL ELECTRICAL EQUIPMENT AND DEVICES WITH THE ARCHITECTURAL ELEVATIONS AND DETAILS PRIOR TO ROUGH-IN.
- DEMOLITION WORK IS A PART OF THIS PROJECT. SEE DRAWINGS FOR EXISTING ELECTRICAL DEVICES TO BE REMOVED. REMOVE ASSOCIATED BOXES, RACEWAYS AND CONDUCTORS BACK TO SOURCE, AND MAKE SAFE.
- ALL MATERIALS AND EQUIPMENT FURNISHED TO THE PROJECT SHALL BE NEW AND SHALL BEAR THE LISTING LABEL OF A NATIONALLY RECOGNIZED TESTING LAB AS DEFINED BY OSHA.
- ALL ELECTRICAL DEVICES AND TERMINALS SHALL BE RATED 75°C MINIMUM.
- ALL CONDUCTORS SHALL BE STRANDED COPPER, 600 VOLT RATED. INSULATION TYPE SHALL BE THHN/THWN, FULLY COLOR CODED WITH GAUGE, TYPE AND MANUFACTURER MARKED EVERY 24" ALONG. CONDUCTOR COLOR CODE SHALL BE AS FOLLOWS:

208Y/120 VOLT	SYSTEM	480Y/277 VOL	<u> T SYSTEM</u>
PHASE A	- BLACK	PHASE A	- BROWN
PHASE B	- RED	PHASE B	- ORANGE
PHASE C	- BLUE	PHASE C	- YELLOW
NEUTRAL	- WHITE	NEUTRAL	- GRAY
GROUND	- GREEN	GROUND	- GREEN
MINIMUM SIZE WIRE F	OR POWER AND LIGHT	TING CIRCUITS	SHALL BE #12 AWG.

- ALL POWER AND LIGHTING CONDUCTORS SHALL BE ROUTED IN 3/4" CONDUIT MINIMUM.
- M. EMT OR MC TYPE CABLE IS ALLOWED WHEN CONCEALED IN INTERIOR SPACES. MC TYPE CABLE IS NOT ALLOWED FOR HOMERUNS.
- MAKE ALL CONNECTIONS TO EQUIPMENT PER MANUFACTURER'S REQUIREMENTS.
- ALL EQUIPMENT, SWITCHING DEVICES AND PANELS SHALL BE MOUNTED SO AS TO BE ACCESSIBLE AND SHALL BE MOUNTED PLUMB AND SQUARE WITH
- DEVICES AND RACEWAYS PENETRATING FIRE RATED WALLS AND FLOORS SHALL BE SEALED WITH FIRE RESISTIVE MATERIAL, COMPATIBLE WITH CONSTRUCTION PENETRATED. TO MAINTAIN RATING OF THE WALL. SEALANT SYSTEM SHALL BE A U.L. APPROVED SYSTEM AND INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- Q. FURNISH AND INSTALL PULL CORD IN ALL EMPTY CONDUITS.
- ALL JUNCTION BOX COVERS WITH POWER WIRING SHALL HAVE THE PANEL AND CIRCUIT LABELED ON THE OUTSIDE SURFACE. ALL LABELS FOR EXPOSED JUNCTION BOXES IN "FINISHED AREAS" SHALL BE LABELED UTILIZING SELF ADHESIVE LABELS PRODUCED BY A MECHANICAL LABELING MACHINE. LABELS FOR JUNCTION BOX COVERS IN CONCEALED LOCATIONS SHALL CONSIST OF THE INFORMATION BEING NEATLY HANDWRITTEN ON THE OUTSIDE SURFACE OF THE COVER WITH A PERMANENT STYLE MARKER.
- CLEARLY LABEL ALL ACCESSIBLE CONDUIT STUBS WITH SYSTEM NAME AND LOCATION (ROOM NUMBER) WHERE THE OTHER END OF THE CONDUIT TERMINATES. USE INDELIBLE INK. THE LABELS SHALL BE LOCATED ON THE CONDUIT IN A POSITION THAT CAN BE EASILY READ.
- ALL 1 POLE BREAKER CIRCUITS SHALL HAVE AN INDEPENDENT NEUTRAL CONDUCTOR. NO EDISON STYLE SHARED NEUTRAL CONDUCTORS ARE
- ALL CONDUCTORS IN ELECTRICAL PANELS, CABINETS AND EQUIPMENT SHALL BE NEATLY TRAINED AND LACED.
- THE CONTRACTOR SHALL PROVIDE UPDATED CIRCUIT PANEL DIRECTORIES FOR ALL PANELS. DIRECTORIES SHALL BE TYPED.
- W. PROVIDE ELECTRICAL SUBMITTALS FOR EQUIPMENT SHOWN AS REQUIRED BY DIVISION 1 SPECIFICATIONS.
- ELECTRICAL CONTRACTOR SHALL OBTAIN THE AVAILABLE FAULT CURRENT VALUE FROM THE LOCAL UTILITY OR THE ONE-LINE DIAGRAM AND LABEL THE MAIN BREAKER WITH THAT VALUE.
- SWITCH AND RECEPTACLE LABELING: IDENTIFY PANELBOARD AND CIRCUIT NUMBER FROM WHICH DEVICES ARE SERVED. USE MACHINE PRINTED LABEL AND 1/8" TEXT. INSTALL ON THE OUTSIDE OF THE FACEPLATE FOR RECEPTACLES AND INSIDE THE FACEPLATE FOR SWITCHES.



MUSGROVE ENGINEERING, P.A 234 S. Whisperwood Way Boise, ID 83709 208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 23-182

ELECTRICAL GENERAL NOTES

- THESE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE; THEREFORE, THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICE LOCATIONS WITH ARCHITECTURAL, MECHANICAL. AND PLUMBING DIVISIONS PRIOR TO ROUGH-IN. REFER TO AND COORDINATE WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL WORK THAT IS REQUIRED BY THE ELECTRICAL CONTRACTOR.
- ALL CONDUIT AND JUNCTION BOXES ARE TO BE CONCEALED UNLESS LOCATED WITHIN DEDICATED ELECTRICAL OR MECHANICAL ROOMS. USE OF SURFACE MOUNTED RACEWAYS IN ALL OTHER SPACES MUST BE APPROVED BY THE ARCHITECT FOR EACH LOCATION. WHERE SURFACE RACEWAYS ARE APPROVED, UTILIZE WIREMOLD, OR APPROVED EQUAL, SURFACE MOUNTED RACEWAYS PAINTED TO MATCH SURROUNDING WALLS.
- REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET HEIGHTS WHERE THE SPECIFIC OUTLET HEIGHT IS NOT INDICATED. REFER TO THE ELECTRICAL LEGEND FOR THE DEFAULT OUTLET HEIGHT WHEN NOT INDICATED ON ELEVATIONS OR ON AT THE DEVICES.
- PROVIDE PULL-LINE IN ALL EMPTY CONDUITS.
- TERMINATE ALL LOW-VOLTAGE CONDUITS WITH INSULATED THROAT BUSHING.
- MECHANICAL EQUIPMENT INDICATED IS SHOWN IN AN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.

SITE:

TRENCHING DETAIL.

- CONTRACTOR SHALL COORDINATE WITH AN UNDERGROUND LOCATING SERVICE PRIOR TO COMMENCING WORK. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION. COORDINATE WITH OTHER SITE DISCIPLINES.
- REFER TO POLE BASE DETAIL FOR SITE LIGHTING POLE BASE REQUIREMENTS
- ROUTE CONDUITS IN COMMON TRENCH WHERE POSSIBLE REFER TO

S Ф

S



— ш

ロエロ

SHEET TITLE:

COVER SHEET

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

SHOWN or IMPLIED

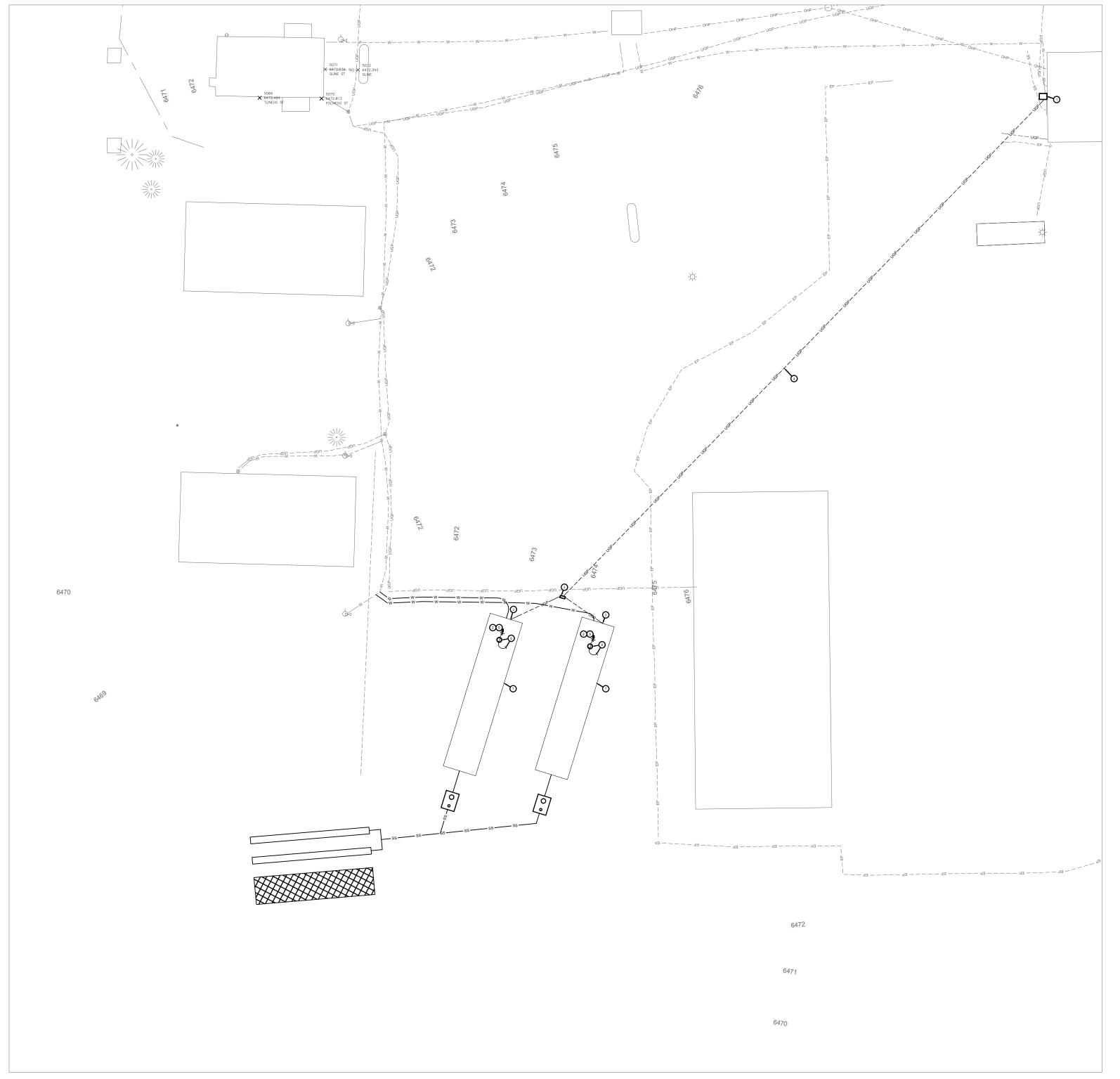
CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS REVISION

NUMBER: NUMBER: 23604

E0.0

SHEET



ELECTRICAL SITE PLAN



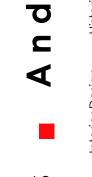
MUSGROVE ENGINEERING, P.A. 234 S. Whisperwood Way 208.384.0585 645 West 25th Street

Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 23-182

KEYED NOTES:

SYMBOL USED FOR NOTE CALLOUT.

- EXISTING TRANSFORMER.
- 2. APPOXIMATE LOCATION OF NEW SERVICE.
- 3. VERIFY CABLE ENTRANCE WITH MANUAFCTURE'S INSTALLATION MANUAL. ELECTRICIAN TO SEE ONE-LINE DIAGRAM E2.0
- 4. NEW UNDERGROUND SECONDARY CONDUCTORS. SEE FALL RIVER ELECTRIC'S CURRENT SERVICE GUIDE FOR MORE INFORMATION.
- 5. ROUTE 3/4"C-2#12,1#12G FOR PIPE FREEZE PROTECTION HEATING CABLES TO MODULAR BUILDING PANELBOARD. FURNISH AND INSTALL (1) 20A, SINGLE POLE, GFEP (30mA) TYPE CIRCUIT BREAKER IN AVAILABLE BUSSED SPACE IN MODULAR BUILDING PANELBOARD. NEW CIRCUIT BREAKER SHALL MATCH EXISTING, COORDINATE WITH MODULAR BUILDING'S PANELBOARD PRIOR TO BEGINNING WORK. UPDATE PANELBOARD DIRECTORY.
- 6. FURNISH AND INSTALL RAYCHEM PIPE FREEZE PROTECTION HEAT CABLE, 5XL1 OR APPROVED EQUAL ON THE MODULAR BUILDING'S EXPOSED WASTE LINE AND EXPOSED COLD WATER PIPING AS REQUIRED. INSTALL PER MANUFACTURER'S INSTRUCTIONS. REFER TO THE FLEEWOOD HOMES WASTE LINE AND COLD WATER PIPING DRAWINGS FOR LENGTHS AND ADDITIONAL INFORMATION. COORDINATE WITH THE ARCHITECT FOR THE FLEETWOOD DRAWINGS. INSTALL HEAT CABLE TO BELOW FROST LINE ON THE INCOMING COLD WATER LINE AND OUTGOING WASTE LINE AS REQUIRED. FURNISH AND INSTALL (1) RAYCHEM AMC-F5 FIXED TEMPERATURE THERMOSTAT FOR HEAT CABLE CONTROL/MONITORING. INSTALL THERMOSTAT PER MANUFACTURER'S INSTRUCTIONS. FURNISH AND INSTALL ALL REQUIRED POWER CONNECTIONS, END SEALS, HEAT CABLE TAPE OR STRAPPING AND ELECTRIC TRACE WARNING LABEL/TAPE FOR A COMPLETE AND FUNCTIONING SYSTEM.
- 7. NEW MODULAR LIVING UNIT



S

Φ

S



HO

SHEET TITLE:

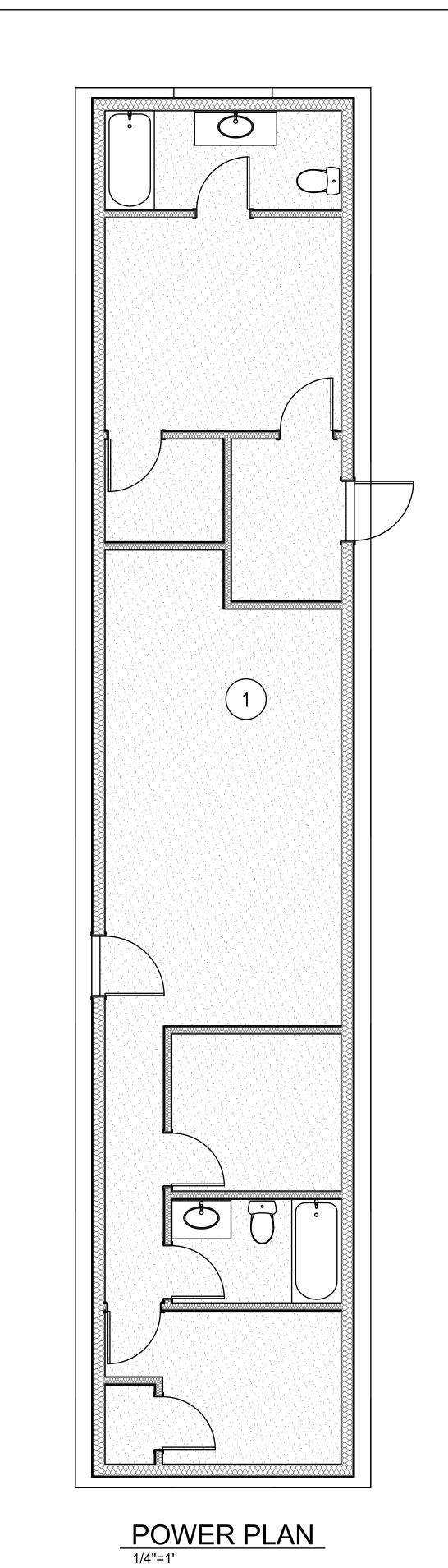
ELECTRICAL SITE PLAN

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

SE1.0





MUSGROVE ENGINEERING, P.A. 234 S. Whisperwood Way Boise, ID 83709 208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com

Project No. 23-182

SYMBOL USED FOR NOTE CALLOUT.

ALL FIXTURES ARE PROVEDED AND INSTALLED IN
 ACCORDANCE WITH THE BUILDING MANUFACTURE'S
 INSTALLATION MANUAL. NO ADDITIONAL WORK SCOPE IS
 REQUIRED

KEYED NOTES:



0

S

SHEET TITLE:

POWER PLAN

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION

ARCH.
JOB
NUMBER: 23604

SHEET **E1.0**



MUSGROVE ENGINEERING, P.A.

234 S. Whisperwood Way Boise, ID 83709 645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 23-182

S 0

S Φ

HO

SHEET TITLE:

ONELINE DIAGRAM & TRENCH DETAIL

DRAWING SCALE APPLIES TO 22" X 34" SHEET SIZE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS & CONDITIONS SHOWN or IMPLIED

DO NOT DISTRIBUTE PARTIAL SETS OF DRAWINGS or SPECIFICATIONS

REVISION

CLIENT PROJ. NUMBER: ARCH. JOB NUMBER: 23604

SHEET **E2.0**

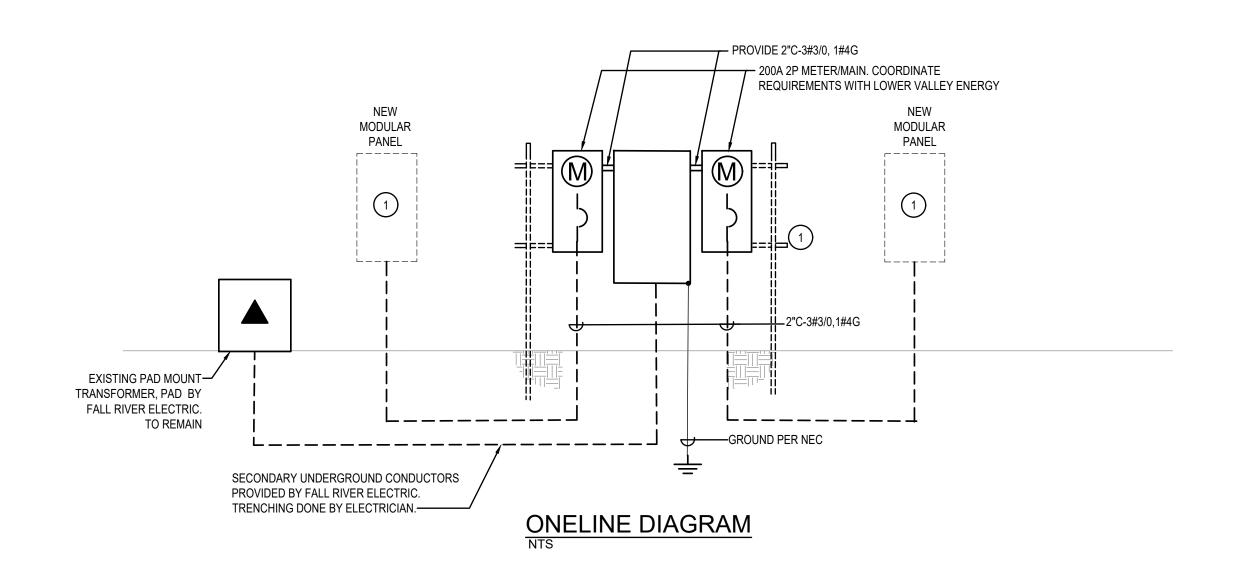
PATCH TO MATCH ASPHALT, CONCRETE, EXISTING FINISH CONDITIONS LAWN, ETC COMPACTED FILL IN 6" LIFTS FINISHED GRADE OR PER SPECIFICATIONS / / / / 6" RED MARKER TAPE, RUN LENGTH OF TRENCH— CONDUITS-—SAND BEDDING AND BACKFILL BY CONTRACTOR

DETAIL NOTES:

- #) SYMBOL USED FOR NOTE CALLOUT.
- 1. IF MULTIPLE CONDUITS SHARE TRENCH, PROVIDE SPACING BETWEEN CONDUITS. PROVIDE ZIP TIES, AND TIE ALL CONDUITS TOGETHER TO ENSURE STABILITY.
- 2. BURIAL DEPTH TO BE VERIFIED WITH UTILITIES AND AUTHORITY HAVING JURISDICTION: ELECTRICAL FEEDERS, COMMUNICATIONS: 24" MINIMUM UNDERGROUND SECONDARY: 30" MINIMUM UNDERGROUND PRIMARY: 42" MINIMUM

SITE TRENCHING DETAIL

NTS



DETAIL NOTES:

- # SYMBOL USED FOR NOTE CALLOUT.
- 1. FURNISH AND INSTALL STRUT RACK FOR MOUNTING ELECTRICAL EQUIPMENT SHOWN. REFER TO THE ELECTRICAL SITE PLAN FOR LOCATION AND ADDITIONAL INFORMATION.
- 2. MODULAR BUILDING PANELBOARD. REFER TO THE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.